

Code No.28117

**Anti-Human
Tti1/KIAA0406 Rabbit IgG Affinity Purify**Volume : 100 µg

Introduction : Mammalian target of rapamycin (mTOR), a member of the phosphatidylinositol 3-kinase-related kinase (PIKK), is a major regulator of translation, cell growth, and autophagy. mTOR constitutes two distinct complexes, mTORC1 and mTORC2, that differ in their subunit composition.

Tti1/KIAA0406 was identified as a novel mTOR-interacting protein. Tti1 constitutively interacts with mTOR in both mTORC1 and mTORC2. Knockdown of Tti1 suppresses phosphorylation of both mTORC1 substrates (S6K1 and 4E-BP1) and an mTORC2 substrate (Akt), and also induces autophagy. And it has been confirmed that Tti1 binds to Tel2 also in mammalian cells and Tti1 interacts with and stabilizes all six members of the PIKK family of proteins (mTOR, ATM, ATR, DNA-PKcs, SMG-1, and TRRAP). Furthermore, it has been reported that knockdown of either Tti1 or Tel2 causes disassembly of mTORC1 and mTORC2. These results indicate that Tti1 and Tel2 are important not only for mTOR stability but also for assembly of the mTOR complexes to maintain their activities.

Antigen : Synthetic peptide of the C terminal part of Human Tti1/KIAA0408 (ASGQQNPYTTNVLQLLKELQ)

Purification : Purified with antigen peptide

Form : Lyophilized product from 1 % BSA in PBS containing 0.05 % NaN₃

How to use : 1.0 mL deionized water will be added to the product (the conc. comes up 100 µg /mL)

Stability : Lyophilized product, 5 years at 2 – 8 °C
: Solution, 2 years at –20 °C

Application : This antibody can be used for western blotting in concentration of 1 - 5 µg /mL.

Reference : 1. Kaizuka T, Hara T, Oshiro N, Kikkawa U, Yonezawa K, Takehana K, Iemura S, Natsume T, Mizushima N. Tti1 and Tel2 are critical factors in mammalian target of rapamycin complex assembly. J Biol Chem. 2010 Jun 25;285(26):20109-16.

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